

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 21, 22, 29, and 30 are allowed.
2. The following is an examiner's statement of reasons for allowance: The closest available prior art—the Maenishi (US 2005/0129997 A1), Taguchi (US 2003/0175562 A1), and Ukai (US 2001/0002248 A1) references—disclose features similar to the claimed invention, but are lacking key components. None of the three references actively recite counting the number of times the apparatus is started or stopped and then modifying the temperature of the apparatus according to the number of times of start or stop. The references anticipated the previous claims because they started and stopped a component in their respective apparatuses a certain number of times (this was construed to be "counting") and based temperatures within apparatus components based on this set number of starts and stops. The claims now specifically recite that the number of times of start-up and/or stop of the whole hydrogen generator (including a reformer, a shift converter, and a heater) are counted and the temperature of the shift converter specifically is modified based on this number. The claims also now recites that an accumulated operation time of the hydrogen generator is counted and the temperature of the shift converter specifically is modified based on this number. These features, in combination with the remaining elements of the process claims, are novel and there is no motivation in the prior art of record to modify the Maenishi, Taguchi, or Ukai references to incorporate these features.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IMRAN AKRAM whose telephone number is (571)270-3241. The examiner can normally be reached on 10-7 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on 571-272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Imran Akram/  
Primary Examiner, Art Unit 1723